

isc N-Channel MOSFET Transistor

APT30M70BVR

FEATURES

- Drain Current –I_D=48A@ T_C=25 °C
- Drain Source Voltage-
 - : V_{DSS}=300V(Min)
- Static Drain-Source On-Resistance
 - : $R_{DS(on)} = 0.07 \Omega (Max)$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



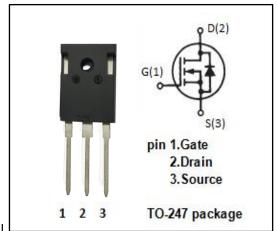
 Designed for use in switch mode power supplies and general purpose applications.

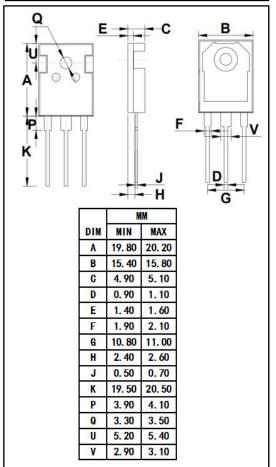
ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

| SYMBOL | PARAMETER | VALUE | UNIT |
|------------------|--|-----------------------|------------|
| V_{DSS} | Drain-Source Voltage | in-Source Voltage 300 | |
| V _{GS} | Gate-Source Voltage-Continuous | ±30 | V |
| ΙD | Drain Current-Continuous 48 | | А |
| I _{DM} | Drain Current-Single Pluse 192 | | А |
| P _D | Total Dissipation @T _C =25℃ | 370 | W |
| TJ | Max. Operating Junction Temperature | -55~150 | °C |
| T _{stg} | Storage Temperature | -55~150 | $^{\circ}$ |

THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | MAX | UNIT |
|---------------------|--------------------------------------|------|------|
| R _{th j-c} | Thermal Resistance, Junction to Case | 0.34 | °C/W |







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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | MAX | UNIT |
|----------------------|---------------------------------|---|-----|-----------|------|
| V _{(BR)DSS} | Drain-Source Breakdown Voltage | V _{GS} = 0; I _D = 0.25mA | 300 | | V |
| V _{GS(th)} | Gate Threshold Voltage | V_{DS} = V_{GS} ; I_D = 1mA | 2 | 4 | V |
| R _{DS(on)} | Drain-Source On-Resistance | V _{GS} = 10V; I _D =24A | | 0.07 | Ω |
| Igss | Gate-Body Leakage Current | V _{GS} = ±30V;V _{DS} = 0 | | ±100 | nA |
| I _{DSS} | Zero Gate Voltage Drain Current | V _{DS} = 300V; V _{GS} = 0 V _{DS} = 240V; V _{GS} = 0@T _J =125℃ | | 25 250 | μА |
| V _{SD} | Forward On-Voltage | I _S =48A; V _{GS} = 0 | | 1.3 | V |

NOTICE:

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